Cephalalgia

An International Journal of Headache

Volume 22 2002

Editor-in-Chief, P J Goadsby, *UK*
Deputy Editor, H Kaube, *UK*

Associate Editors
F Michael Cutrer, *Boston, USA*
David Dodick, *Scottsdale, USA*
Lars Edvinsson, *Lund, Sweden*
Michel Ferrari, *Leiden, The Netherlands*
Edith Hamel, *Montreal, Canada*
Kenneth Holroyd, *Athens, USA*
Richard Lipton, *New York, USA*
Jean Schoenen, *Liege, Belgium*
Steven Silberstein, *Philadelphia, USA*
Peer Tfelt-Hansen, *Copenhagen, Denmark*

Book Review Editor, Allen Purdy, *Canada*

Historical Section Editor, Peter J Koehler, *The Netherlands*

Blackwell Publishing Ltd.
OXFORD LONDON EDINBURGH
BOSTON MELBOURNE BERLIN TOKYO VIENNA

Osney Mead, Oxford OX2 0EL
23 Ainslie Place, Edinburgh EH3 6AJ
Commerce Place, 350 Main Street, Malden, MA 02148-5018, USA
PO Box 378, Carlton South, Victoria 3053, Australia
Blackwell Wissenschafts-Verlag GmbH, Kurfürstendamm 57, 10707 Berlin, Germany
Blackwell Science KK, MG Kodenmacho Building, 7–10 Kodenmacho Nihombashi, Chuo-ku, Tokyo 104, Japan
Blackwell MZV, Feldgasse 13, A-1238 Wien, Austria

© 2002 International Headache Society. Authorization to photocopy for internal or personal use or the internal or personal use of specific clients is granted by Blackwell Science Ltd for libraries and other general users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the base fee of $15.00 per copy is paid directly to the CCC, 222 Rosewood Drive, Suite 910, Danvers, MA 01923, USA. This consent does not extend to other kinds of copying, such as copying for general distribution for advertising or promotional purposes, for creating new collective works or for resale. Special requests should be addressed to the International Headache Society.

ISSN 0333-1024

Typeset by SNP Best-set Typesetter Ltd., Hong Kong. Printed and bound by H. Charlesworth Ltd., Huddersfield, UK.

Contents

Volume 22, Number 1, February 2002

Editorial commentary

1 M B Russell: Cluster headache sine headache: two new cases in one family

Review

2 P Barbanti, G Fabbrini: Migraine and the extrapyramidal system

Original articles

12 M Leone, A Rigamonti, G Bussone: Cluster headache sine headache: two new cases in one family

15 C Aprill, M J Axinn, N Bogduk: Occipital headaches stemming from the lateral atlanto-axial (C1–2) joint

23 R Stark, C Dahlöf, S Haughie, J Hettiarachchi: Efficacy, safety and tolerability of oral eletriptan in the acute treatment of migraine: results of a phase III, multicentre, placebo-controlled study across three attacks

33 D D'Amico, A Ferraris, M Leone, A Catania, A Carlin, L Grazzi, G Bussone: Increased plasma nitrites in migraine and cluster headache patients in interictal period: basal hyperactivity of L-arginine-NO pathway?

37 B Tom, P De Vries, J P C Heiligers, E W Willems, K Kapoor, G W John, P R Saxena: Effects of donitriptan on carotid haemodynamics and cardiac output distribution in anaesthetized pigs

48 E Thomas, P S Sándor, A Ambrosini, J Schoenen: A neural network model of sensitization of evoked cortical responses in migraine

54 L H Lassen, P A Haderslev, V B Jacobsen, H K Iversen, B Sperling, J Olesen: CGRP may play a causative role in migraine

62 K Podoll, D Robinson: Splitting of the body image as somesthetic aura symptom in migraine

66 D Li, T D Rozen: The clinical characteristics of new daily persistent headache

70 International Headache Society, report and accounts 31 December 2000

Volume 22, Number 2, March 2002

Original articles

83 R W M van de Broek, P Bhalla, A M VanDen Brink, R de Vries, H S Sharma, P R Saxena: Characterization of sumatriptan-induced contractions in human isolated blood vessels using selective 5-HT_{1b} and 5-HT_{1d} receptor antagonists and *in situ* hybridization

94 K Ekbom, D A Svensson, H Träff, E Waldenlind: Age at onset and sex ratio in cluster headache: observations over three decades

101 A Dowson, E A MacGregor, R A Purdy, W J Becker, J Green, S L Levy: Zolmitriptan orally disintergrating tablet is effective in the acute treatment of migraine

107 P J Goadsby: Neurovascular headache and a midbrain vascular malformation: evidence for a role of the brainstem in chronic migraine

112 R Uddman, J Tajti, M Hou, F Sundler, L Edvinsson: Neuropeptide expression in the human trigeminal nucleus caudalis and in the cervical spinal cord C1 and C2

117 P D Drummond: Motion sickness and migraine: optokinetic stimulation increases scalp tenderness, pain sensitivity in the fingers, and photophobia

125 B W Müller, G Sartory, A Tackenberg: The movement-related potential in children with migraine and tension-type headache

132 S Bender, M Weisbrod, U Just, U Pfüller, P Parzer, F Resch, R Oelkers-Ax: Lack of age-dependent development of the contingent negative variation (CNV) in migraine children?

137 T Rozen, M L Oshinsky, C A Gebeline, K C Bradley, W B Young, A L Shechter, S D Silberstein: Open label trial of coenzyme Q10 as a migraine preventive

142 K Benedek, J Tajti, M Janáky, L Vécsei, G Benedek: Spatial contrast sensitvity of migraine patients without aura

Clinical correspondence

146 S I Lipscombe, T Prior: Is there any relationship between handedness and unilateral headache in migraine?

149 M Gabrielli, A Gasbarrini, G Fiore, L Santarelli, C Padalino, D De Martini, M Giacovazzo, P Pola: Resolution of migraine with aura after successful treatment of a pituitary microadenoma

151 Z Katsarava, M Frings, H Kaube, H C Diener, V Limmroth: Selective damage of trigeminal Aδ fibres in Raeder's syndrome following dissection of the ICA detected by a nociceptive blink reflex

154 J G Heckmann, C J G Lang, W Dietrich, B Neidhardt, B Neundörfer: Symptomatic migraine linked to stroke due to paradoxical embolism and elevated thrombosis risk

157 G Relja, M Zorzon, L Locatelli, N Carraro, R M Antonello, G Cazzato: Hypnic headache: rapid and long lasting response to prednisone in two new cases

160 S Evers, A Frese, A Majewski, O Albrecht, I W Husstedt: Age of onset in cluster headache: the clinical spectrum (three case reports)

163 **Announcement**

Volume 22, Number 3, April 2002

Original articles

165 M Drottning, P H Staff, O Sjaastad: Cervicogenic headache (CEH) after whiplash injury

172 J E Magnusson, W J Becker: A comparison of disability and psychological factors in migraine and transformed migraine

179 R Virtanen, M Aromaa, P Rautava, L Metsähonkala, P Anttila, H Helenius, M Sillanpää: Changes in headache prevalence between pre-school and pre-pubertal ages

186 S Förderreuther, M Mayer, A Straube: Treatment of cluster headache with topiramate: effects and side effects in five patients

190 I J M Benseñor, P A Lotufo, D Mion-Jr, M A Martins: Blood pressure behaviour in chronic daily headache

195 A May, M A Gamulescu, U Bogdahn, C P Lohmann: Intractable eye pain: indication for triptans

197 E J Piovesan, E Zukerman, P A Kowacs, L C Werneck: COX-2 inhibitor for the treatment of the idopathic stabbing headache secondary to cerebrovascular diseases

201 D F Black, D W Dodick: Two cases of medically and surgically intractable SUNCT: a reason for caution and an argument for a central mechanism

205 M El Amrani, H Massiou, M G Bousser: A negative trial of sodium valproate in cluster headache: methodological issues

209 H C Diener, J Matias-Guiu, E Hartung, V Pfaffenrath, H P Ludin, G Nappi, F de Beukelaar: Efficacy and tolerability in migraine prophylaxis of flunarizine in reduced doses: a comparision with propranolol 160 mg daily

222 I Ciancarelli, C Di Massimo, M G Tozzi-Ciancarelli, G De Matteis, C Marini, A Carolei: *Helicobacter pylori* infection and migraine

226 C Tassorelli, F Blandini, A Costa, E Preza, G Nappi: Nitroglycerin-induced activation of monoaminergic transmission in the rat

233 T Strecker, M Dux, K Messlinger: Increase in meningeal blood flow by nitric oxide – interaction with calcitonin gene-related peptide receptor and prostaglandin synthesis inhibition

242 M E Bigal, S J Tepper, A M Rapoport, F D Sheftell: Hemicrania continua: comparison between two different classification systems

246 M F P Peres, H C Siow, T D Rozen: Hemicrania continua with aura

Letter to the Editor

249 J Porta-Etessam, A Matinez-Salio, A Berbel, J Benito-Leon: Gabapentin (neuronetin) in the treatment of SUNCT syndrome

Volume 22, Number 4, May 2002

Original articles

251 J A Pareja, M Barón, P Gili, J Yangüela, A B Caminero, J L Dobato, F J Barriga, L Vela, M Sánchez-del-Río: Objective assessment of autonomic signs during triggered first divison trigeminal neuralgia

256 P Barbanti, G Fabbrini, M Pesare, N Vanacore, R Cerbo: Unilateral cranial autonomic symtoms in migraine

260 A C Honey, P A Bland-Ward, H E Connor, W Feniuk, P P A Humphrey: Study of an adenosine A1 receptor agonist on trigeminally evoked dural blood vessel dilation in the anaesthetized rat

265 P-H M van der Kuy, J J H M Lohman: A quantification of the placebo response in migraine prophylaxis

271 J van der Post, M T Schram, R C Schoemaker, M S M Pieters, E Fuseau, A Pereira, S Baggen, A F Cohen, J M A van Gerven: CNS effects of sumatriptan and rizatriptan in healthy female volunteers

282 N N Vachharajani, W-C Shyu, P S Nichola, D W Boulton: A pharmacokinetic interaction study between butorphanol and sumatriptan nasal sprays in healthy subjects: importance of the timing of butorphanol administration

288 B Dora, S Balkan: Exaggerated interictal cerebrovascular reactivity but normal blood flow velocities in migraine without aura

291 E P Calandre, J Bembibre, M L Arnedo, D Becerra: Cognitive disturbances and regional cerebral blood flow abnormalities in migraine patients: their relationship with the clinical manifestations of the illness

303 R Leira, A Dávalos, Á Aneiros, J Serena, J M Pumar, J Castillo: Headache as a surrogate marker of the molecular mechanisms implicated in progressing stroke

309 A V Krymchantowski, J S Barbosa: Rizatriptan combined with rofecoxib vs. rizatriptan for the acute treatment of migraine: an open label pilot study

313 E L H Spierings: Acute and chronic hypertensive headache and hypertensive encephalophathy

317 L J Stovner, K Hagen, A Waage, K S Bjerve: Hereditary haemochromatosis in two cousins with cluster headache

History

320 C J Boes, D J Capobianco, M S Matharu, P J Goadsby: Wilfred Harris' early description of cluster headache

Letter to the Editor

327 M E Bigal, A M Rapoport, F D Sheftell, S J Tepper: Long-term follow-up of patients treated for chronic daily headache with analgesic overuse

329 **Book review**

Volume 22, Number 5, June 2002

Editorial commentary

331 T Whitmarsh: Survey on the use of complementary and alternative medicine among patients with headache syndromes

Original articles

333 J-P Neau, J Paquereau, M Bailbe, J-C Meurice, P Ingrand, R Gil: Relationship between sleep apnoea syndrome, snoring and headaches

340 P Anttila, L Metsähonkala, M Mikkelsson, M Aromaa, H Kautiainen, J Salminen, S Viander, E Jäppilä, M Sillanpää: Muscle tenderness in pericranial and neck-shoulder region in children with headache. A controlled study

345 M E Bigal, C A Bordini, S J Tepper, J G Speciali: Intravenous magnesium sulphate in the acute treatment of migraine without aura and migraine with aura. A randomized, double-blind, placebo-controlled study

354 A-M Landtblom, S Fridriksson, J Boivie, J Hillman, G Johansson, I Johansson: Sudden onset headache: a prospective study of features, incidence and causes

361 L Lykke Thomsen, M Kirchmann Eriksen, S Faerch Romer, I Andersen, E Ostergaard, N Keiding, J Olesen, M B Russell: An epidemiological survey of hemiplegic migraine

376 F Sakai, M Iwata, K Tashiro, Y Itoyama, S Tsuji, Y Fukuuchi, G Sobue, K Nakashima, M Morimatsu: Zolmitriptan is effective and well tolerated in Japanese patients with migraine: a dose–response study

384 D D Mitsikostas, M Sanchez del Rio, C Waeber: 5-Hydroxytryptamine$_{1B/1D}$ and 5-hydroxtryptamine$_{1F}$ receptors inhibit capsaicin-induced *c-fos* immunoreactivity within mouse trigeminal nucleus caudalis

395 S von Peter, W Ting, S Scrivani, E Korkin, H Okvat, M Gross, C Oz, C Balmaceda: Survey on the use of complementary and alternative medicine among patients with headache syndromes

401 P Anttila, L Metsähonkala, M Aromaa, A Sourander, J Salminen, H Helenius, P Alanen, M Sillanpää: Determinants of tension-type headache in children

Clinical correspondence

409 H Mariano da Silva, M C Alcantara, C A Bordini, J G Speciali: Strictly unilateral headache reminiscent of hemicrania continua resistant to indomethacin but responsive to gabapentin

Volume 22, Number 6, July 2002

Original articles

411 D Cologno, P Torelli, G C Manzoni: A prospective study of the headache phase in 32 migraine with aura patients

416 Eletriptan Steering Committee in Japan: Efficacy and safety of eletriptan 20 mg, 40 mg and 80 mg in Japanese migraineurs

424 D Smith, R G Hill, L Edvinsson, J Longmore: An immunocytochemical investigation of human trigeminal nucleus caudalis, CGRP, substance P and 5-HT$_{1D}$-receptor immunoreactivities are expressed by trigeminal sensory fibres

432 M E Bigal, F D Sheftell, A M Rapoport, R B Lipton, S J Tepper: Chronic daily headache in a tertiary care population: correlation between the International Headache Society diagnostic criteria and proposed revisions of criteria for chronic daily headache

439 E J Eross, D W Dodick, K D Nelson: Orthostatic headache syndrome with CSF leak secondary to bony pathology of the cervical spine

444 C Tataroglu, A Kanik, G Sahin, A Özge, D Yalçinkaya, F Idiman: Exteroceptive suppression patterns of masseter and temporalis muscles in central and peripheral headache disorders

453 A J Dowson, H Massiou, J M Lainez , X Cabarrocas: Almotriptan is an effective and well-tolerated treatment for migraine pain: results of a randomized, double-blind, placebo-controlled clinical trial

462 O Sjaastad, L S Bakketeig: Tractor drivers' head- and neck-ache: Vågå study of headache epidemiology

468 M Fukuda, N Suzuki, S Maruyama, K Dobashi, A Kitamura, F Sakai: Effects of sumatriptan on cerebral blood flow under normo- and hypercapnia in rats

474 J A van Vliet, A A Vein, S le Cessie, M D Ferrari, J G van Dijk: Reproducibility and feasibility of neurophysiological assessment of the sensory trigeminal system for future application to paroxysmal headaches

Clinical correspondence

482 R M Sadler, R A Purdy, S Rahey: Vagal nerve stimulation aborts migraine in patient with intractable epilepsy

485 G D'Andrea, F Granella, F Verdelli: Migraine with aura triggered by orgasm

487 **Book review**

488 **Erratum**

Volume 22, Number 7, September 2002

Editorial commentary

489 P Montagna: Back to vitamins?

Review

491 S D Silberstein, P J Goadsby: Migraine: preventive treatment

Original articles

513 P-H M van der Kuy, F W H M Merkus, J J H M Lohman, J W M ter Berg, P M Hooymans: Hydroxocobalamin, a nitric oxide scavenger, in the prophylaxis of migraine: an open pilot study

520 M F P Peres, M A Stiles, H C Siow, T D Rozen, W B Young, S D Silberstein: Greater occipital nerve blockade for cluster headache

523 V Pfaffenrath, H C Diener, M Fischer, M Friede, H H Henneicke-von Zepelin: The efficacy and safety of *Tanacetum parthenium* (feverfew) in migraine prophylaxis—a double-blind, multicentre, randomized placebo-controlled dose-response study

533 F Antonaci, M Bulgheroni, S Ghirmai, S Lanfranchi, E Dalla Toffola, G Sandrini, G Nappi: 3D kinematic analysis and clinical evaluation of neck movements in patients with whiplash injury

543 P Mattsson, L Ekselius: Migraine, major depression, panic disorder, and personality traits in women aged 40–74 years: a population-based study

552 J Haan, E E Kors, M D Ferrari: Familial cyclic vomiting syndrome

555 E L H Spierings: Reflux-triggered migraine headache originating from the upper gum/teeth

557 F Mainardi, F Maggioni, F Dainese, P Amistà, G Zanchin: Spontaneous carotid artery dissection with cluster-like headache

Letters to the Editor

560 R Ferrari: The chronic whiplash syndrome—a case of attributional pathosis?

563 P J Goadsby, R B Lipton: The hemicrania continua diagnosis

566 **Book review**

Abstracts of the 14th Migraine Trust International Symposium

568 **Invited lectures**

570 **Platform presentations**

581 **Poster presentations**

614 **Author index**

Volume 22, Number 8, October 2002

Review

617 J A Astin, E Ernst: The effectiveness of spinal manipulation for the treatment of headache disorders: a systematic review of randomized clinical trials

Original articles

624 E Loder: What is the evolutionary advantage of migraine?

633 M D Ferrari, P J Goadsby, K I Roon, R B Lipton: Triptans (serotonin, 5-HT$_{1B/1D}$ agonists) in migraine: detailed results and methods of a meta-analysis of 53 trials

659 W B Young, M M Hopkins, A L Shechter, S D Silberstein: Topiramate: a case series study in migraine prophylaxis

664 P Tfelt-Hansen, K McCarroll, C Lines: Sum of Pain Intensity Differences (SPID) in migraine trials. A comment based on four rizatriptan trials

667 O Sjaastad, T A Fredriksen: Cervicogenic headache: lack of influence of pregnancy

672 K Hagen, L Vatten, L J Stovner, J-A Zwart, S Krostad, G Bovim: Low socio-economic status is associated with increased risk of frequent headache: a prospective study of 22718 adults in Norway

680 N C Santanello, G Davies, C Allen, M Kramer, R Lipton: Determinants of migraine-specific quality of life

History

686 P J Koehler, H Isler: The early use of ergotamine in migraine. Edward Woakes' report of 1868, its theoretical and practical background, and its international reception

Clinical correspondence

692 V Raieli, G L Eliseo, B M Monforte, D Puma, D Ragusa, M Eliseo: The alien hand and migraine with aura: a case report

Letter to the Editor

695 M G Smits, J E Nagtegaal: Melatonin for cluster headache

Volume 22, Number 9, November 2002

Editorial commentary

697 K M A Welch: Hope, through a glass, darkly

Review

699 S Evers, A Rahmann, J Vollmer-Haase, I-W Husstedt: Treatment of headache with botulinum toxin A—a review according to evidence-based medicine criteria

Original articles

711 A J Wilkins, R Patel, P Adjamian, B J W Evans: Tinted spectacles and visually-sensitive migraine

720 M F P Peres, E Zukerman, W B Young, S D Silberstein: Fatigue in chronic migraine patients

725 T D Rozen: Atypical presentations of cluster headache

730 A I M Nilsson Remahl, R Ansjön, E Waldenlind: Hyperbaric oxygen treatment of active cluster headache: a double-blind placebo-controlled cross-over study

740 M J Prior, K M Cooper, L G May, D L Bowen: Efficacy and safety of acetaminophen and naproxen in the treatment of tension-type headache. A randomized, double-blind, placebo-controlled trial

749 E M Bednarczyk, D S Wack, M Y Kassab, K Burch, K Trinidad, M Haka, J Gona: Brain blood flow in the nitroglycerin (GTN) model of migraine: measurement using positron emission tomography and transcranial doppler.

758 C Sjöstrand, H Modin, T Masterman, K Ekbom, E Waldenlind, J Hillert: Analysis of nitric oxide synthase genes in cluster headache

Clinical correspondence

765 J Gutiérrez-Morlote, J Pascual: Cardiac cephalgia is not necessarily an exertional headache: case report

Obituary

767 M D Ferrari: Obituary: George W. Bruyn

769 **Erratum**

Volume 22, Number 10, December 2002

Editorial commentary

771 W B Young: Hypovolaemic headache is complex

Review

772 C J Boes, M S Matharu, P J Goadsby: Benign cough headache

Original articles

780 B Mokri: Spontaneous CSF leaks mimicking benign exertional headaches

784 O Sjaastad, L S Bakketeig: Exertional headache I. Vågå study of headache epidemiology

791 A Özge, R Bugdayci, T Sasmaz, H Kaleagasi, Ö Kurt, A Karakelle, H Tezcan, A Siva: The sensitivity and specificity of the case definition criteria in diagnosis of headache: a school-based epidemiological study of 5562 children in Mersin

799 R B McCall, R Huff, C L Chio, R TenBrink, C L Bergh, M D Ennis, N B Ghazal, R L Hoffman, K Meisheri, N R Higdon, E Hall: Preclinical studies characterizing the anti-migraine and cardiovascular effects of the selective 5-HT_{1D} receptor agonist PNU-142633

807 C Lampl, A Buzath, K Yazdi, P S Sandor: Ergot and triptan overuse in Austria – an evaulation of clinical data and cost during 1999

812 A Jiménez-Huete, O Franch, J A Pareja: SUNCT syndrome: priming of symptomatic periods and worsening of symptoms by treatment with calcium channel blockers

815 L J M M Mulder, E L H Spierings: Naratriptan in the preventive treatment of cluster headache

818 D D'Amico, A Rigamonti, A Solari, M Leone, S Usai, L Grazzi, G Bussone: Health-related quality of life patients with cluster headache during active periods

Clinical correspondence

822 G T A Warner: Spontaneous intracranial hypotension causing a partial third cranial nerve palsy: a novel observation

824 C A R Pinto, Y D Fragoso, D de Souza Carvalho, A A Gabbai: Hypnic headache syndrome: clinical aspects of eight patients in Brazil

Letters to the Editor

828 E Loder: 'HIS' or 'HIS'?

829 D A Fishbain: Cervicogenic headache

831 **Book reviews**

835 **Announcement**

836 **To our reviewers**

838 **Author index**

843 **Subject index**